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**United States Patent** [19][11] **Patent Number:** **6,030,308****Beck**[45] **Date of Patent:** **Feb. 29, 2000**

[54] **ADJUSTABLE ENDLESS BELT FOR USE IN POWER TRANSMISSION AND APPARATUS AND METHODS FOR FORMING BELT**

5,176,583 1/1993 Schanin et al. .... 474/166

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[57] **ABSTRACT**[21] Appl. No.: 09/128,705[22] Filed: **Aug. 4, 1998**

An endless belt particularly adapted for use in high speed power transmission, commonly termed a fan belt, which is particularly adapted to be readily formed on site to any desired length and methods and apparatus for forming the belt. The belt is comprised of an outer length of flexible tear-resistant material having abutting ends so as to form a closed loop and defining an endless channel extending longitudinally therethrough. An inelastic ribbon of flexible tear-resistant material is disposed within the channel and extends about the loop defined by the outer length of material such that the ribbon extends across the abutting ends of the outer length of material and the ends of the reinforcing ribbon are in an abutting relationship within the channel at a location substantially diametrically opposed across the formed loop from the abutting ends of the outer length of material. An adhesive is disposed within the channel about the reinforcing ribbon securing the ribbon to the outer length of material so as to maintain the outer length of material in a closed loop configuration of predetermined size.

**Related U.S. Application Data**

[63] Continuation-in-part of application No. 08/863,392, May 27, 1997, Pat. No. 5,788,595, which is a continuation-in-part of application No. 08/574,845, Dec. 19, 1995, Pat. No. 5,632,700.

[51] Int. Cl.<sup>7</sup> ..... **F16G 3/10**[52] U.S. Cl. .... **474/254; 474/264; 474/268**[58] Field of Search ..... **474/253, 254, 474/264, 268; 156/502**[56] **References Cited****U.S. PATENT DOCUMENTS**

Re. 33,389 10/1990 Beck ..... 474/253  
 4,637,810 1/1987 Beck ..... 474/253  
 5,129,866 7/1992 Schanin et al. .... 474/264

**16 Claims, 10 Drawing Sheets**